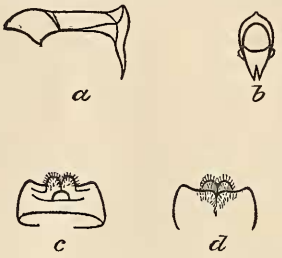
VIII.—*The Rutelid Genus* Adorodocia *and a new Allied Form.* By Gilbert J. Arrow.

In continuation of remarks recently made in this Magazine (May 1901) upon the genus *Adoretus* and some of its allies, I have a few observations to make upon the genus *Adorodocia* of Brenske ('Societas Entomologica,' 1893, p. 1), a chance examination of which has opened up questions of extreme interest and shown the genus to be in some respects the most remarkable in the family to which it belongs.

The genus was formed for a new species, *Adorodocia maxima*, the author including in it also *Adoretus latissimus*, Blanch., to which, from the description, he believed *A. strigatus*, Waterh., to be closely related, if not actually the same. Upon examination of the last species I find it to agree exactly, in spite of M. Fairmaire's positive statement to the contrary (Ann. Soc. Ent. Belg. 1896, p. 455), with the characters mentioned by Herr Brenske as distinguishing his genus, which, however, do not apply to the true *Adoretus latissimus* (evidently the *A. eunectoides*, Fairm.). It seems therefore that *A. strigatus* is the insect referred to by Herr Brenske under the name of *latissimus*. The thoracic marks, as he thought likely, have a tendency to disappear; but while those of *A. strigatus* consist of longitudinal stripes parallel to the margins, *A. latissimus* has a transverse row of spots. The latter species, although of extraordinary form, the elytra being produced laterally into a broad flange, is in its structural details a true *Adoretus*, while in *Adorodocia strigata*, on the contrary, external resemblance is the chief bond with that genus. In addition to the flattened prosternal process, the emarginate labium, and the cleft terminal segment of the abdomen, an important feature not observed by Herr Brenske is the possession of a conspicuous membranous fringe to the elytra, the absence of which, according to Lacordaire, is the distinguishing characteristic of the group Adoretides. Although the existence of a prosternal process seems to forbid its being assigned to any other group, it is impossible to refuse significance to this character, especially as it occurs in conjunction with so many other peculiar features. In fact, until a new system of classification is devised to replace that of Lacordaire, this genus also must be added to those which gather upon the uncertain borderlands, finding as yet no ordered resting-place.

The remarkable form of the last abdominal segment of this insect is characteristic of the male sex, the female showing only the slightest reminiscence of it. As might be supposed,

the male apparatus connected with this structure is exceedingly peculiar—indeed, so extraordinary that, but that the sex of the other form of the species is beyond doubt, it would have left the determination of the sexes still uncertain. The ventral and dorsal aspects of this apparatus are shown at *c* and *d* in the accompanying sketch.



The two sexual forms are easily distinguishable by their external appearance, the males being more depressed, with a larger head and less convex pronotum, the latter being more broadly margined laterally. Three specimens of each sex are contained in the British Museum.

Although Herr Brenske has not investigated the sexual characters of the type species, *Adorodocia maxima*, there can be no doubt that it is congeneric with and closely related to *A. strigata*; but whereas the sculpture of the latter is simply a coarse puncturation, the former is described as "aciculately" punctured.

Exceedingly like *Adorodocia strigata*, and for more than twenty years undistinguished from it in the British Museum collection, is an insect which upon careful examination has proved so different from it in its structural details that another genus has of necessity to be formed for it. The single specimen is a male, and the genitalia (shown by side and end view at *a* and *b*), although not greatly differing from those of Rutelidæ in general, are so entirely unlike those of the other insect as to suggest no affinity at all. Yet, although there are various other structural differences, the points of resemblance are so many that it is impossible to widely separate the two genera. Altogether the problems suggested by these strange Madagascan forms are of the utmost interest.

The following is the generic diagnosis of the new insect:—

PSEUDADORODOCIA, gen. nov.

Caput magnum. Clypeus semicircularis. Labrum triangularis, apice prolongato. Labium medio emarginatum. Antennæ 10-articulatæ, elongatæ, articulis tertio et sexto valde elongatis.

Processus prosternalis lamelliformis, postice parum productus. Mesosternum acuminatum, non productum. Ungues multo inæquales, pedum quatuor anteriorum majores ante apicem minutissime fissi, posticorum simplici. Pygidium integrum. Segmentum ultimum ventrale emarginatum, non fissum. Elytra distincte membranaceo-marginata.

It must not be forgotten that this diagnosis is drawn up from the male alone and that one or two of the characters cited will probably apply only to that sex. The mouth-parts are as in *Adorodocia*, but the clypeus is semicircular instead of pointed. The prosternal process has the same compressed form, but is not strongly produced backwards as in *Adorodocia*. The claws, again, in the two anterior pairs of legs are minutely cleft beyond the middle, whereas in the other genus both sexes have them equally divided at the tip. The membranous margin to the elytra is again present. Finally, the different form of the last abdominal segment is correlated to the entire difference in the genitalia already mentioned.

Pseudadorodocia œnigma, sp. n.

Supra omnino pallide testacea, prothorace vage bimaculato, subdepressa, modice elongata, undique breviter albo-setosa; capite magno, oculis prominentibus, clypeo semicirculari, cum fronte (ab illo linea recta demarcata) grosse punctato; prothorace valde transverso, lateribus regulariter curvatis, angulis anticis paulo acutis, dorso grosse irregulariter punctato, utroque latere linea vaga fusca ornato; scutello lateribus punctato; elytris irregulariter et confluenter punctatis, punctis lineis longitudinalibus indistinctis formantibus lateribus fere parallelis; pygidio corporeque subtus rufis, illo cum pectore longius hirsuto; tibiis anticis bidentatis, dente tertio obsoleto.

Long. 16 mm.

Hab. Madagascar, Antananarivo.

The specimen was found by Mr. Kingdon and has been in the Museum since 1879. It deceptively resembles *Adorodocia strigata*, Waterh., but is rather smaller and narrower, in addition to which the semicircular clypeus affords the most apparent distinction. The description of *Adoretus maculicollis*, Fairm., applies very nearly to this insect, but the former is said to have dark marks upon the vertex, a narrow dark lateral margin to the elytra, and the under surface "vage cœrulescens," of none of which is there any indication in my type.

I have learnt just before the publication of this note that Mr. F. Bates has three specimens of this insect in his collection. Mr. Bates has kindly examined these for me, and finds

that, while two correspond with my type, the third (obviously the female), a rather darker specimen, differs in having the two claws of the foot more equal (a difference found also between the sexes of *Adorodocia strigata*), while the larger claw is very slightly and equally divided *at the tip*. The front claws are lost, but I think it may be assumed that in claw-structure the female *P. œnigma* is exactly similar to the female *A. strigata*.

IX.—*New Species of* Noctuidæ *from Tropical America.*

By W. Schaus, F.Z.S.

Calydia norduca.

Head and thorax yellowish buff, irrorated with brown scales. Abdomen pale brown. Primaries yellowish buff, irrorated on costa and base with black scales; inner line very oblique to subcostal vein, then slightly curved to inner margin, pale metallic blue, outwardly shaded with ochreous; inner margin tinged with lilacine; median line very oblique from costa to end of cell, then wavy to inner margin near angle, pale metallic blue and lilacine; an outer pale blue metallic line very obliquely curved to outer margin at vein 4, then following margin to angle, and inwardly shaded with ochreous brown; above vein 4 a marginal metallic line and the veins silvery; on costa the metallic lines are striated with black. Secondaries somewhat hyaline buff, shading to pale brown on outer margin; a marginal line from apex to vein 3, inwardly white, outwardly metallic; some black and silvery scales at vein 2, preceded by a lilacine spot.

Expanse 19 millim.

Hab. Jalapa, Mexico.

Palindia merta.

Palpi, head, and collar dark grey. Thorax fawn-colour. Abdomen brown, the subdorsal tufts fawn-colour. Primaries: a little less than basal half fawn-colour; whitish in the cell, except a large blackish-brown space on costal margin to submedian vein, and containing a small lighter brown spot at base of costa; traces of an inner line, dentate above median, twice curved below it; the curve on inner margin inwardly shaded with black scales; a velvety black median line shaded on either side with dark reddish brown, outwardly oblique